

REMARKS

By this Amendment, Applicant amends claims 1, 8, 9, and 11 to further clarify the features set forth therein and claim 4 for improved conformity. Applicant also cancels claims 2, 3, 7, and 12-15 without prejudice or disclaimer and adds new claims 16-29, which are clearly supported throughout the specification. Hence, claims 1, 4-6, 8, 9, 11, and 16-29 are all the claims pending in the application.

Applicant respectfully submits that this Amendment is fully responsive to the Office Action dated December 22, 2008, which is a Non-Final Office Action. Pursuant to the Examiner interview of January 6, 2009, the Office Action was improperly marked as a Final Office Action.

Claim Rejections - 35 U.S.C. § 112

Claims 12-15 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. These claims have been cancelled, rendering this rejection moot.

Claim Rejections - 35 U.S.C. § 102

Claims 1-9 and 11 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Sebire et al. (U.S. Pub. 2004/0120302, hereinafter "Sebire"). Applicant respectfully traverses the rejection.

Claims 1, 9, and 11

Claim 1 *inter alia* recites supporting the real-time traffic in a packet mode in the core network, the core network connected to the GERAN via a Gb interface, wherein said dedicated channel allocation is performed on creating a packet flow context (PFC) in the GERAN. Claims 9 and 11 recites *inter alia* and in some variation a module which supports real time traffic by

allocating dedicated channels to said real time traffic, wherein said module performs said allocation on creating a packet flow context (PFC) in the GERAN.

In general, real-time services that are sensitive to transfer delays, for example voice traffic or streaming traffic, are distinguishable from non-real-time services that are not sensitive to transfer delays, for example data transfers. Typically, real-time services are supported in circuit mode where the real-time service traffic is transported in dedicated channels that are permanently allocated to a user throughout the duration of a call. Conversely, non-real-time services are supported in packet mode where the non-real-time service traffic is transported over shared channels that are allocated to a plurality of users. *See* Specification, p. 1, ll. 9-36.

Second generation (2G) communications systems, for example global system for mobile communications (GSM) type systems, include a radio access network (RAN) connected to a core network (CN) by an “A” type interface and a “Gb” type interface. *See* Specification, p. 2, l. 1 - p. 3, l. 5. However, the “Gb” interface is only capable of supporting non-real-time services, and real-time services are only supported by the “A” interface. *See* Specification, p. 4, ll. 12-21. However, adapting 2G systems to support third generation (3G) system services, for example Internet Protocol (IP) multimedia services (IMSS), is complex and expensive. *See* Specification, p. 3, l. 6 - p. 4, l. 11.

In an exemplary embodiment, a method of supporting real-time services over a “Gb” type interface is provided, thus making it possible to adapt existing architectures for IMSS. In particular, existing radio protocols and channels, which are used for real-time services, may be used when real-time services are relayed between an RAN and a CN. More particularly,

dedicated channels may be used to transport packet data units (PDUs) to or from the CN instead of shared channels. The dedicated channels allocation is performed on creating a packet flow context in the GERAN. That is, when a PFC is created/modified for a real-time data flow, the unit connected to the "Gb" interface causes a dedicated channel to be established/modified.

However, Sebire does not fairly disclose or suggest the combination of features recited in claim 1. This is because Sebire does not disclose that allocation of the dedicated channel is performed on creating a packet flow context in the GERAN and routing the real-time traffic in packet mode in the core network that is connected to the GERAN via the Gb interface. Rather, paragraph 179 of Sebire discloses:

Embodiments of the present invention take place in GERAN which means that the physical layer is mainly connected to the packet switched core network but can also be connected to the circuit switched core network. Previously there has been on the one hand a circuit switched air interface (TCH+SACCH+idle) connected to a circuit switched core network (through the A interface) and on the other hand a packet switched air interface (PDTCH+PTCCH+idle i.e. PDCH) connected to a packet switched core network (through Gb interface). Embodiments of the present invention allow the circuit switched air interface to be connected to a packet switched core network (through Gb or lu-ps interfaces), and allow the circuit switched air interface to support packet data (not only TCH) and therefore to be also connected to a packet switched core network (through Gb or lu-ps interfaces). Thereby one possible combination over the circuit switched air interface will be PDTCH+SACCH+idle. In case of OS2 a possible combination will be TCH+PDTCH+SACCH+idle. Where a communication system according to the present invention can be implemented.

That is to say, Sebire discloses the circuit switched air interface is connected to the packet switched core network. This permits "the circuit switched air interface to support packet data." Accordingly, at best, Sebire discloses a configuration where the circuit switched air interface,

which provides circuit mode services, supports data traffic from the packet switched core network on dedicated channels.

However, this opposite to the configuration recited in the independent claims, which requires that the real-time traffic is transported in a packet mode via a Gb interface. In addition, Sebire does not disclose or suggest performing the dedicated channel allocation on creating a packet flow context in the GERAN. The Examiner relies on ¶¶ 8, 17-19, and 134 of Sebire to disclose these unique features (*see* page 5 of the Office Action). However, these passages as well as any other passages of Sebire do not suggest allocating of dedicated channels being performed on creating a PFC in the GERAN. In fact, Sebire does not even mention PFC in GERAN.

As a result, Sebire fails to teach or suggest the combination of features recited in claim 1, and hence claim 1 and its dependent claims would not have been anticipated by Sebire for at least these reasons.

Independent claims 9 and 11 recite at least some of the features similar to those discussed above regarding claim 1, and hence claims 9 and 11 also would not have been anticipated by Sebire for at least reasons analogous to those discussed above regarding claim 1.

Claim Rejections - 35 U.S.C. § 103

Claims 12-15 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sebire in view of Krishnarajah et al. (U.S. Pub. 2003/0081592, hereinafter “Krishnarajah”). These claims have been cancelled, rendering this rejection moot.

New Claims


As discussed above, Applicant adds new claims 16-29. Applicant respectfully submits that these claims should be deemed patentable at least by virtue of their dependency. Applicant also respectfully submits that the references cited by the Examiner fail to teach or suggest all the features of these new claims.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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